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TRANSPORTATION ELEMENT

Introduction

The Village of Slinger's transportation system consists of local roads, county and state highways, two railroad corridors and a network of sidewalks. USH 41 is the principal arterial connecting the Village to the greater region and areas beyond.

This chapter examines the transportation network, including a summary of existing transportation plans, studies, and assessments, as well as a series of recommendations to address future transportation needs and desires.

Wisconsin's Comprehensive Planning Law includes 14 goals for local comprehensive planning. The Village of Slinger believes that those goals listed below specifically relate to planning for transportation:

- Encouragement of neighborhood designs that support a range of transportation choices.
- Encouragement of coordination and cooperation among nearby units of government.
- Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit dependent and disabled citizens.



Transportation Vision

In 2025, the Village of Slinger provides a well-connected system of local streets, highways, and railroads that provide for the safe and efficient mobility of people and goods. Sidewalks and trails are an integral part of the transportation network - providing connections between neighborhoods and to nearby lakes, neighboring communities, schools, parks, and other facilities.

Inventory of Existing Transportation Facilities

This section profiles the different transportation choices available in the Village ranging from walking to interstate highways. Railroad, airplane and mass transit services are also discussed. Generally speaking, transportation facilities in the Village of Slinger provide a mix of facilities. Opportunities for safe pedestrian travel are abundant given sidewalks through most areas of the Village. For the most part, Slinger residents rely on their personal automobiles to meet their transportation needs. Other modes of transit, including light rail and air transportation are not available in the Village, nor are they likely to be developed given that the population and local businesses do not demand, nor can they support, these types of transportation services.

PEDESTRIAN FACILITIES

Generally, there are two classifications of walkers: people who walk for recreation/exercise and people who walk for transportation purposes. People who walk as their primary transportation choice are usually without alternatives (i.e. seniors and youth who cannot drive). Most people walk when it is convenient. Generally, walking is considered to be a convenient choice when destinations are within 10-15 minutes (1/2 mile or less). Given the layout, more particularly the central location of major facilities like schools, shopping, churches, parks, the library and post office, walking is a convenient option for many in the Village of Slinger.

Slinger is a community that provides many amenities to make walking a safe option for residents of all ages. The Village requires sidewalk installation in new residential developments and is seeking to complete missing sidewalk connections between developments.



CYCLING OPPORTUNITIES

At this time there are no trails in the Village, only sidewalks. This situation presents some challenges to cyclists. Cyclists either have to share the sidewalks with pedestrians or share the roadways with vehicles. Sidewalk width is not adequate in all areas to simultaneously accommodate the needs of pedestrians and cyclists. Similarly, it is not advisable for cyclists to share the roadways with motor vehicles, particularly along the STH corridors that traverse the Village given high traffic volumes and speeds.

The Land Use and Street System Plan for the Village of Slinger: 2010 recommended bikeways and other recreational trails in the Village of Slinger and surrounding areas. Approximately 32 linear miles of bikeways were recommended in the plan to serve recreation and transportation needs. The recommended bikeway system also included approximately 6.5 miles of Washington County planned bicycle route.

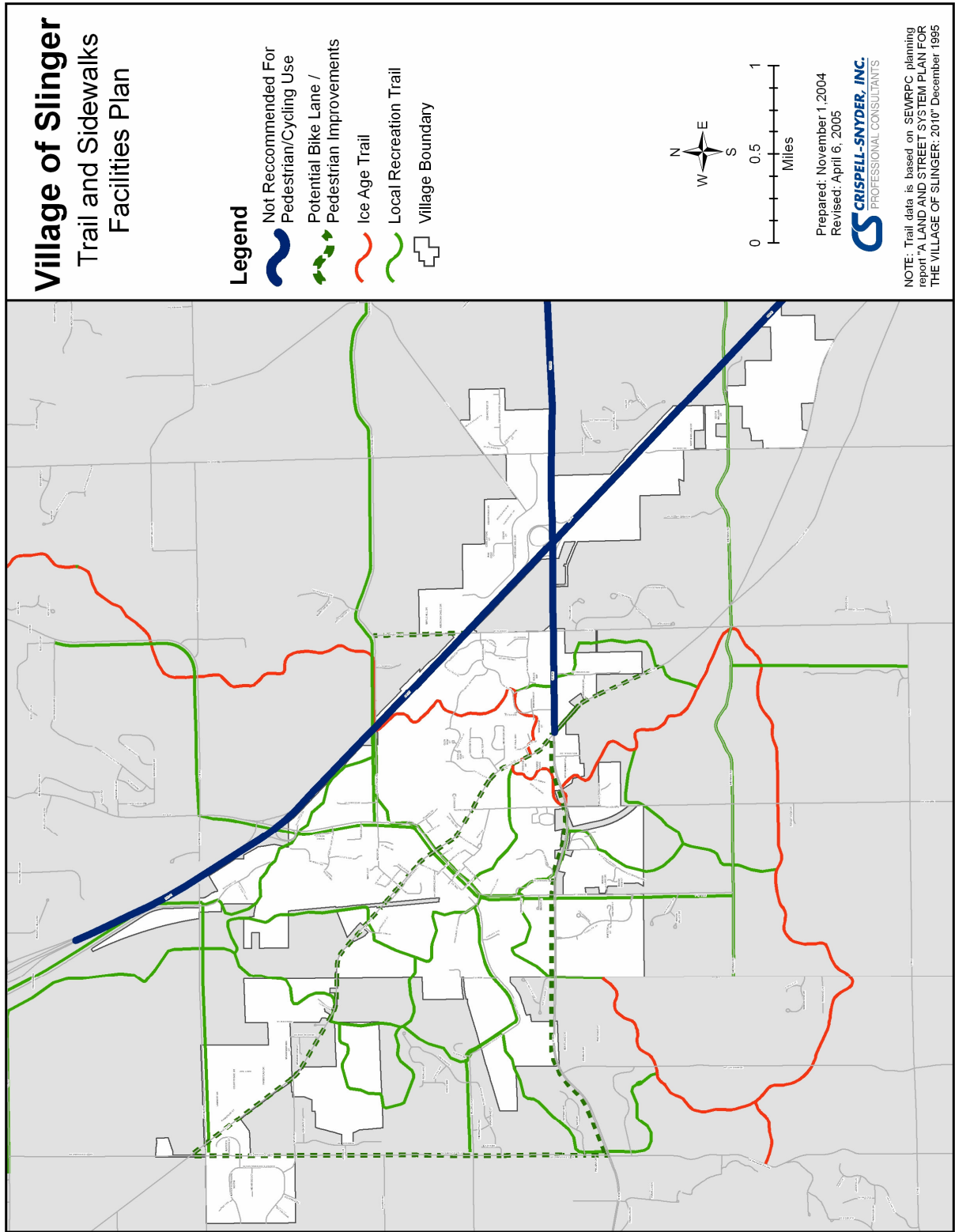
The recommendations of that plan have not been implemented. This Comprehensive Plan reaffirms those recommendations to provide additional transportation choices in the Village, including local trails and the Ice Age National Scenic Trail.

- **Local Trails**

Local trails are designed to compliment the sidewalk system and provide additional choices for pedestrians, cyclists and outdoor enthusiasts. The trails traverse the Village to link together residential areas and public and private park and recreation facilities, public and private schools, and the downtown district. It is also envisioned that local trails would connect with the trail facilities of Pike Lake State Park and the Heritage Trails County Park, as well as, the Ice Age Trail. This interlinked network of trails would provide Slinger residents opportunities for a wider array of trail oriented recreational pursuits, such as hiking and biking, as well as safe and convenient access to major local activity centers.

- **Ice Age National Scenic Trail**

The 1,000-mile Ice Age National Scenic Trail is planned to follow the glacial moraines stretching from Door County to and through the Kettle Moraine area in Southeastern Wisconsin. The completed trail, as proposed, would bisect the Village of Slinger, providing a valuable recreational amenity and opportunity for Village residents. It will also bring tourists



through the Village. Segments of the trail in the four units of the Kettle Moraine State Forest and the Chequamegon National Forest, and many shorter stretches along the route are already open.

- **WisDOT Bicycle Corridors Plan 2020**

This document identifies bicycle trail priorities along State Trunk Highways. The plan calls for a bicycle trail segment to be established between Hartford and Slinger parallel to STH 60 and STH 144. This route was identified to provide a safe crossing over USH 41. This trail is also recommended to connect to Pike Lake State Park.

The *Trail and Sidewalk Facilities Plan Map* illustrates the recommended locations of the Ice Age National Scenic Trail and “local” recreation trails, through Slinger. An in-depth study, considering such pertinent factors as topographic constraints, stormwater conveyance, and minimum right of way requirements should be conducted to determine the precise location and type of trail facility to be provided.



RAILROAD CORRIDORS

There are two railroad corridors in Slinger. One of the lines runs from Chicago to Minneapolis St. Paul via Stevens Point. The other line extends from Horicon to Milwaukee. Both railways are common carriers and can serve as a catalyst for continuing development of Slinger. Access to the railways is valued by the Village (refer to the Values in Chapter 1).

STREETS AND HIGHWAYS

Streets and highways are classified according to their primary function, either to move vehicles or to serve adjacent land. Arterials accommodate the movement of vehicles, while local roads are designed to provide direct access to individual parcels of land. Collectors serve both local and through traffic by providing a connection between arterials and local roads. The descriptions of the functional classes provided below are from the *Transportation Planning Resource Guide*, prepared by WisDOT in March 2001.

Facilities classified under the Federal Aids Secondary System (county trunks and state highways) qualify for federal aid for capital projects involving construction, reconstruction or repair. State highway aids are available to communities for construction and maintenance. Aids cannot exceed 85% of expenditures based on a 3-year average.

- **Principal Arterials.** Serve interstate and interregional trips. These routes generally serve all urban and other areas greater than 5,000 population. USH 41 is the principal arterial in the Village.
- **Minor Arterials.** In conjunction with principal arterials, minor arterials serve cities, large communities, and other major traffic

Streets and highways are classified according to their primary function, either to move vehicles or to serve adjacent land.

- ✓ **Principal Arterials** – serve interstate and interregional trips. These routes are in areas with populations greater than 5,000.
- ✓ **Minor Arterials** – accommodate inter-regional and inter-area traffic movements, often in conjunction with principal arterials.
- ✓ **Major Collectors** – provide service to moderate sized communities and other intra-area traffic generators. Many county trunk highways fall into this classification.
- ✓ **Minor Collectors** – these roads collect traffic from local roads and provide links to all remaining portions of smaller communities and other higher function roads.
- ✓ **Local Roads** – provide direct access to residential, commercial and industrial development.

generators providing an intra-regional and inter-area traffic movements. Minor arterials in Slinger include: STH 60, STH 144 and STH 175.

- **Major Collectors.** Major collectors provide service to moderate sized communities and other intra-area traffic generators, and link those generators to nearby larger population centers or higher function routes. CTH AA is a major collector in Slinger.
- **Minor Collectors.** These types of roads collect traffic from local roads, and provide links to all remaining portions of smaller communities, locally important traffic generators, and higher function roads. Minor collectors in the Village include: Hilldale Road, Hartford Road, and Slinger Road.
- **Local Roads.** The remaining roads in the Village are local. They provide direct access to residential, commercial and industrial uses within the Village.

All the roads described in this section are illustrated by their proposed functional classification on the *Existing Transportation Network Map*. Available traffic volume information at key intersections is also provided on the *Existing Transportation Network Map*.

MASS TRANSIT

Mass transit via a regular bus route, high-speed train, or the like is not currently available in the Village of Slinger. It is also not likely to be established in the next 20 years. This is consistent with the March 2003 report entitled *Comprehensive Planning at the Regional Level in Southeastern Wisconsin: Building a Framework for “Smart Growth” Planning and Development* released by SEWRPC. In that report, it clearly indicates that the Village of Slinger is beyond the limits of the planned transit service area. The nearest transit opportunities are planned in Hartford and areas along the USH 45 corridor, between West Bend and Milwaukee. It assumed that people utilizing the system would drive to transit stations situated at several intersections along USH 45. The nearest planned transit station with parking available to the Village of Slinger, is at the intersection of USH 45 and STH 60.

Beyond the planned regional transit system, there is also a park and ride lot, just beyond the Village limits on CTH K, west of USH 41. While not part of the regional transit system, Village residents can use this lot to carpool.

Residents in need of transit service may also use taxis. Washington County sponsors a public transit system, in the form of a shared-ride taxi service, which is available to all residents of the County. Washington County also sponsors a weekday commuter express service from locations in West Bend, the Washington County Fair Park and Germantown to provide bus transit to Wisconsin Avenue in Downtown Milwaukee, the Milwaukee Regional Medical Center, Mayfair Mall and Watertown Plank Road/Highway 100. Additional information about these county programs is available on the Washington County Internet web site, as well as the Washington County Commuter Express Internet web site (www.ridewccc.com).

WATER TRANSPORTATION

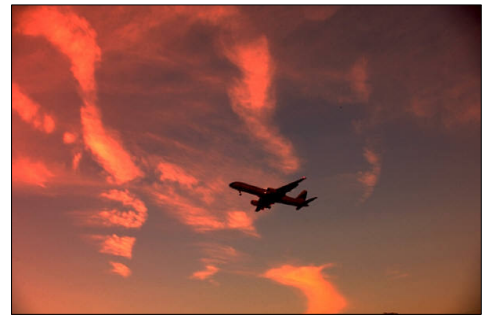
There are no water features in the Village deep enough or wide enough to support water-based transportation opportunities. The nearest water access port is in Milwaukee.

TRUCK TRANSPORTATION

The highway corridors extending through the Village are the primary truck routes. WisDOT has officially designated STH 60, STH 175, STH 144 and USH 41 as truck routes. This designation is based on the design of the roadway to withstand truck weight and traffic. Local truck traffic is found on several other county trunk roads in the Village, but it is much more limited in volume than the truck traffic on these highways.

AIRPORTS¹

There are no airports in the Village and no plans to establish any in the future. The nearest airports are Hartford Municipal Airport and West Bend Municipal Airport. The nearest passenger airport is Milwaukee's General Mitchell International Airport. What follows is a profile of area airport facilities.



- **Hartford Municipal Airport**

This facility averages 42 planes per day, the vast majority of which are single engine planes, along with a few multi-engine planes, gliders and ultra lights. The Hartford Municipal Airport has two runways. One is 3,001 feet long and the other is 2,250 feet. The longer runway is paved, the other has a turf surface. There are no plans to expand Hartford Municipal Airport.

- **West Bend Municipal Airport**

The West Bend Municipal Airport, located three miles east of West Bend, currently consists of two runways - the existing primary runway (Runway 13/31) measures 4,500 by 75-feet and the secondary runway (Runway 6/24) is 3,900-feet long and 75-feet wide. Plans are in progress to reconstruct and possibly realign Runway 6/24 to 5,500-foot length.

West Bend Municipal Airport serves West Bend and Washington County and is owned by the City of West Bend. The facility is classified as a general utility-corporate airport that is designed to handle single and twin-engine aircraft, as well as, corporate jets. West Bend does not have scheduled air carrier services. Hanger space is available at the airport along with tie-down areas.

¹ SOURCE: Airnav.com

- **General Mitchell International Airport**

The Milwaukee County Airport, General Mitchell International, is the largest and busiest airport in the State of Wisconsin. It operates 24 hours per day, seven days per week. General Mitchell's 14 airlines offer roughly 220 daily departures (plus 220 daily arrivals). Approximately 90 cities are served nonstop or direct from the airport. General Mitchell International Airport is owned by Milwaukee County and operated by the Department of Public Works, Airport Division, under the policy direction of the Milwaukee County Executive and the County Board of Supervisors. The airport is entirely funded by user fees; no property tax dollars are used for the airport's capital improvements or for its day-to-day operation.

According to the *WisDOT State Airport System Plan for 2020*, General Mitchell International Airport will continue to provide air carrier and air cargo service through 2020 and beyond. The airport will continue to be the premier facility in the state's air transportation system. Based on the information provided in the *WisDOT State Airport System Plan for 2020*, General Mitchell is forecasted to see operations increase from 215,000 in 2000 to 303,100 by 2020.

According to the *WisDOT State Airport System Plan for 2020*, Hartford and West Bend Municipal Airports will retain their current classifications as general utility and transport/corporate airports. This means that the airports are not expected to experience a significant change in annual operations or facilities.

Recommended Transportation System Improvements

The table on the next page describes transportation improvement projects anticipated within the 20-year planning period in the Village. The projects, along with potential local street connections are identified on the *Recommended Transportation System Improvements Map*. Additional information about area transportation improvements is provided in the "Summary of Existing Transportation Plans" section of this chapter.

Arthur Road Alignment Conflict

This plan recommends Arthur Road to be reconstructed from a 2-lane rural road to a 2-lane urban section including turning lanes and a roundabout at its intersection with STH 175 and Kettle Moraine Road. These improvements would be made along the current route alignment of Arthur Road and are generally in accord with an Intergovernmental Agreement between the Village and the City of Hartford.

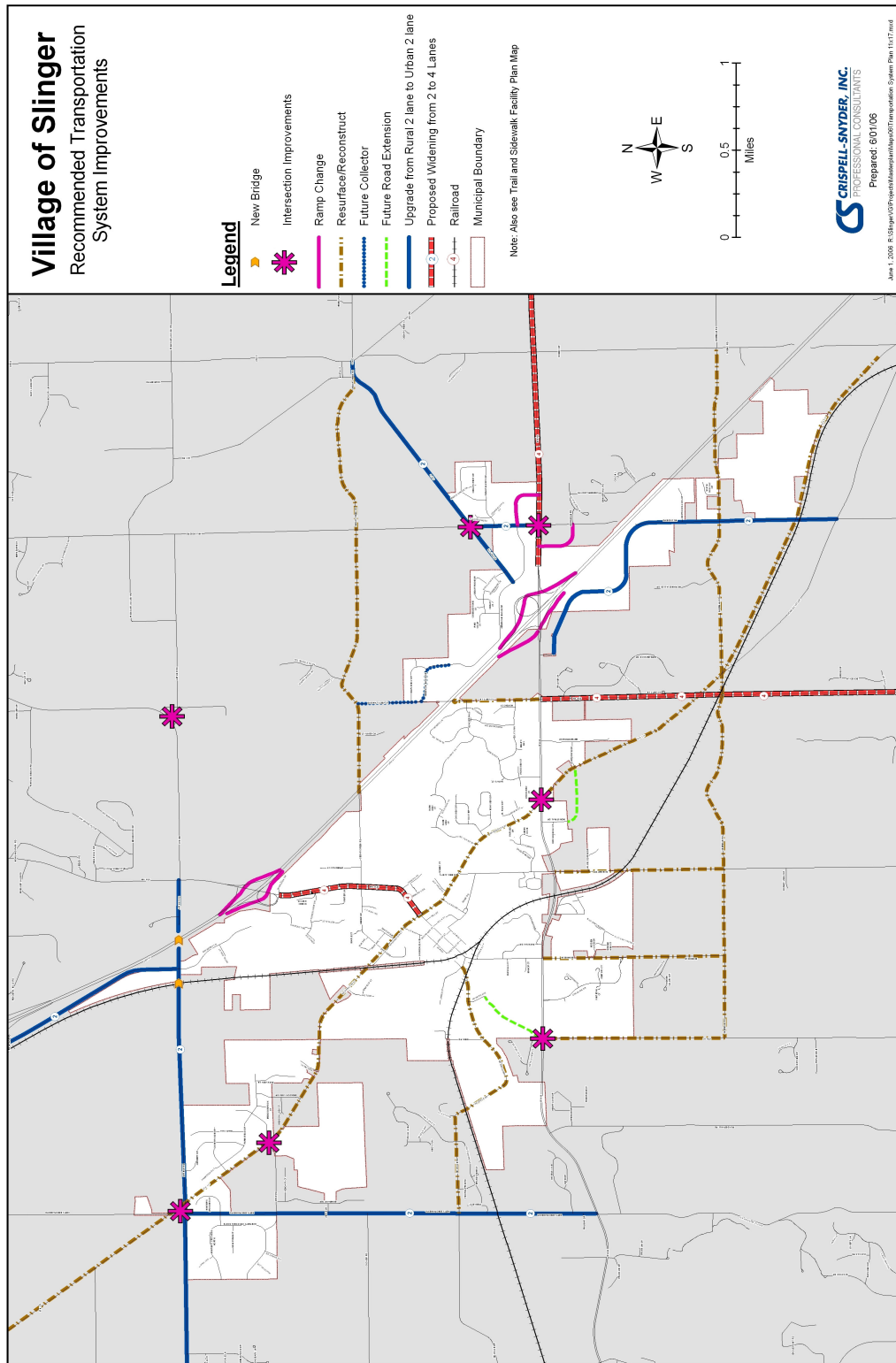
SEWRPC's Arterial Street and Highway System Plan for Washington County – Year 2035 (Map 109) recommends a revision route alignment for a segment of Arthur Road. That segment shifts the route northward and parallel to Arthur Road and curves northeasterly to connect to Kettle Moraine Road.

It is noted that the aforementioned realignment of Arthur Road is SEWRPC's recommendation, not the Village of Slingers. The Village's adopted plan maintains the existing alignment of Arthur Road.

TABLE 17 RECOMMENDED TRANSPORTATION IMPROVEMENTS		
Facility ²	Segment	Recommended Improvement
USH 41/STH 144	Interchange	WisDOT to reconstruct to diamond interchange design
USH 41/STH 60	Interchange	WisDOT to reconstruct ramps with signalization
STH 60/CTH C	Intersection	Construct intersection improvements to significantly improve capacity and safety.
STH 60	From USH 41 to USH 45	Widen to 4 lanes, divided
STH 164	From STH 60 South	Expand to 4 lanes
STH 175	Through Village	Resurface or reconstruct to provide essentially the same capacity with possible intersection improvements and possible pedestrian and bicycle trail facilities where necessary
CTH AA/Cedar Creek Road	USH 41 east to CTH Z	Resurface or reconstruct to provide essentially the same capacity and possible intersection improvements and provide trail segment
CTH CC	From STH 60 south to Sherman Road	Resurface or reconstruct to provide essentially the same capacity NOTE: Resurfacing will be done by Washington County
CTH C	From STH 60 to CTH Z	Reconstruct from 2-lane rural to 2-lane urban section with intersection and drainage improvements, turning lanes, and a roundabout at the intersection of Hillside Road and Stoney Lane
Arthur Road	From CTH NN, over USH 41, to Hartford Intersection with Kettle Moraine Road and with STH 175	Reconstruct from 2-lane rural to 2-lane urban section Construct new bridge over railroad Construct new bridge over USH 41 to connect with CTH NN and possible trail facilities Reconstruct and improve intersection and drainage improvements
Kettle Moraine Road	STH 60 to Arthur Road	Reconstruct from 2-lane rural to 2-lane urban section with intersection and drainage improvements with paved shoulder for a bike/pedestrian trail
Hartford Road/Hilldale Drive	From Kettle Moraine Drive west to Kettle Moraine Road	Resurface or reconstruct to provide essentially the same capacity with bicycle/pedestrian trail
Bonnie Lane	From STH 60 south to Sherman Road	Resurface or reconstruct to provide essentially the same capacity and drainage improvements
Frontage Road/Addison Road	From Arthur north to CTH K	Upgrade from 2-lane rural to 2-lane collector with intersection improvements and paved shoulder for bicycle/pedestrian trail
Howard Avenue	From Hartford Road to STH 60 and intersection with STH 60	Construct segment to connect Howard Ave. from Hartford Road to STH 60 with intersection improvement at STH 60, Kettle View Court, and Howard Ave.
Bicycle Ways Associated with Street of Highway Rights-of Way	Pike Lake State Park to STH 175 via STH 60 Sherman Road to eastern plan area limits Bonnie Lane from STH 60 to Sherman Road STH 144 from STH 60 to CTH NN CTH NN between STH 144 and northern plan area limits	Paved shoulder or separated bicycle/pedestrian trail NOTE: Trail segments identified are included on 2020 Bicycle Way System Plan Map for Washington County included within the Park and Open Space Plan for Washington County adopted March 2004.
Bicycle Way	From Sherman Road to CTH E (Section 29)	Bicycle way associated with natural resource corridor
Lovers Lane	USH 41 to STH 60	Reconstruct to urban 2-lane section
Stoney Lane	Woodland Way to CTH C	Reconstruct to urban 2-lane section and drainage improvements
Hillside Road Connector	STH 60 to Hillside Road	Construct segment to connect STH 60 to Hillside Road as a 2-lane urban collector
Hillside Road	USH 41 southward	Reconstruct to 2-lane urban section
Sherman Road	CTH CC to Scenic Road	Reconstruct to 2-lane urban section with intersection improvements and a bicycle/pedestrian trail

² See appendix materials for diagrams of cross sections for different functional classifications.

Insert 11x17 map



Summary of Existing Transportation Plans

WISDOT STATE HIGHWAY PLAN 2020

Wisconsin's State Trunk Highway system, consisting of approximately 11,800 miles of roads, is aging and deteriorating at the same time traffic is increasing. In response to this critical issue, WisDOT, in partnership with its stakeholders, has developed the *WisDOT State Highway Plan 2020*, a 21-year strategic plan which considers the highway system's current condition, analyzes future uses, assesses financial constraints and outlines strategies to address Wisconsin's preservation, traffic movement, and safety needs. The plan is updated every six years to reflect changing transportation technologies, travel demand and economic conditions in Wisconsin.

The plan indicates that STH 60, between USH 41 and STH 151 (including the segment through Slinger), will experience moderate congestion if improvements are not made. STH 60, spanning east from USH 41 to USH 45, is expected to experience severe congestion. The report does not indicate that any other state highways in and around the Village will experience traffic congestion by 2020. Nor does the WisDOT Plan include upgrades to STH 60 as a project identified for funding through 2020.

To implement the *WisDOT State Highway Plan 2020*, a six-year capital improvement plan is prepared by WisDOT. This plan is updated annually to identify project priorities. *WisDOT's 2006 – 2011 Highway Improvement Program* identifies the following projects in the area of the Village of Slinger:

- 2007 – STH 60 from Powder Hill RD to USH 41. Resurface 3.0 miles of asphalt roadway.
- 2009-11 – Freeway conversion of 50.42 miles of roadway to freeway, providing access only at designated interchanges.
- 2009-11 – Slinger to Grafton RD. Reconstruction of 3.33 miles to 4 lanes of STH 60 from USH 41 to USH 45.
- 2009-11 – Slinger to West Bend RD (STH 144). Preventative maintenance overlay of 5.3 mi.
- 2009-11 – STH 175 Lannon RD to STH 60. Mill and overlay of 10.6 miles.
- 2009-11 – Modernization of the interchange at STH 60 and USH 41.

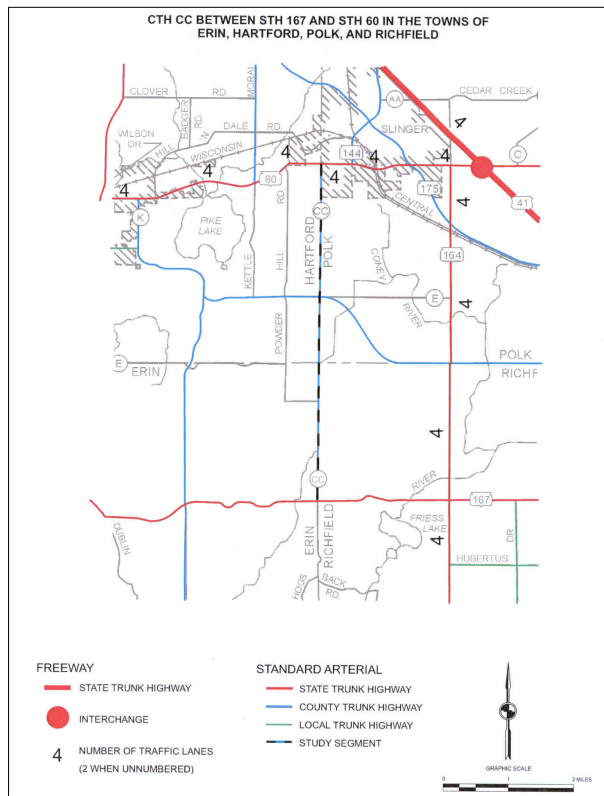
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC)

The *Washington County Jurisdictional Highway System Plan: 2020* was adopted by the Washington County Board of Supervisors on March 12, 2002, and by the Regional Planning Commission on June 19, 2002. The 2002 report describes the original plan, summarizes major actions taken to date and proposes revisions to the plan.

In (and immediately adjacent to) the Village of Slinger, the plan includes the following recommendations:

Capacity Improvement Recommendations

- Widening of STH 164 (Lover's Lane Road) between STH 175 and STH 60 to four lanes to provide additional capacity. *Project completed in 2004.*
- Development of a new overpass over USH 41 at Arthur Road.
- Extend Pioneer Road between CTH CC and STH 164.



Jurisdiction Transfer Recommendations

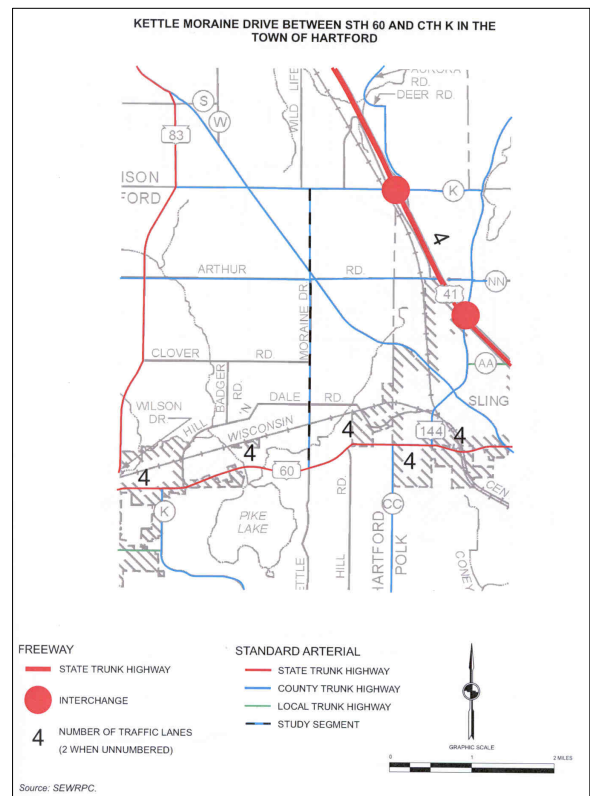
- **Transfer 5.06 miles of CTH CC between STH 167 and STH 60 from the county trunk arterial system to the local trunk highway system.**

CTH CC carries a modest amount of predominately local traffic - fewer than 850 vehicles per average weekday. In addition, the land uses served by the CTH CC do not warrant a county trunk highway. While CTH CC abuts Pike Lake State Park, it does not provide access to the State Park. Moreover, CTH CC is closely paralleled by two major county and state arterials (STH 164 and CTH K). The Plan recommends transfer of the roadway from the County to the Village of Slinger (0.25 miles) and Towns of Erin, Hartford, Polk and Richfield.

- **Kettle Moraine Road, between STH 60 and CTH K, should remain a planned arterial under local jurisdiction, rather than as a planned county arterial.**

This segment of roadway was not identified as an arterial in the original plan for Washington County adopted in 1975. In a 2000 amendment, this roadway was added to the arterial system and to the planned county trunk highway system. This segment of Kettle Moraine Road does not currently operate as an arterial and it is not needed to perform as a county trunk highway under current conditions.

In the future, this segment of Kettle Moraine Road will function as an arterial, based upon the planned development of Slinger. However, this segment of Kettle Moraine Road is not needed to provide route continuity on the county trunk highway system. Therefore, the *Washington County Jurisdictional Highway System Plan – 2020* includes this segment of Kettle Moraine Road as an arterial with local jurisdiction.

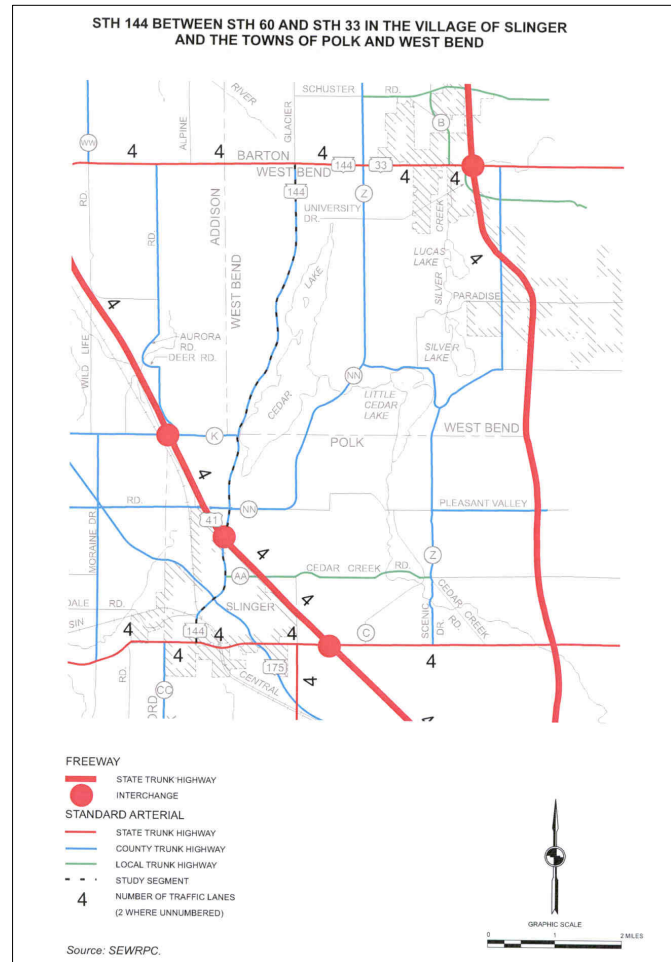


NOTE: Map provided by SEWRPC refers incorrectly to Kettle Moraine Drive. Map should read Kettle Moraine Road.

- **Jurisdictional transfer of STH 144 to the local trunk arterial system rather than the country trunk arterial system.**

The original 1975 plan recommended that STH 144 become a county trunk highway. The segment of STH 144, between STH 60 and USH 41, lies within the planned urban service area for the Village of Slinger. Although this segment of STH 144 does not provide a direct connection to an interchange with USH 41, it functions primarily to serve intracommunity trips within the Village of Slinger, particularly south of STH 175.

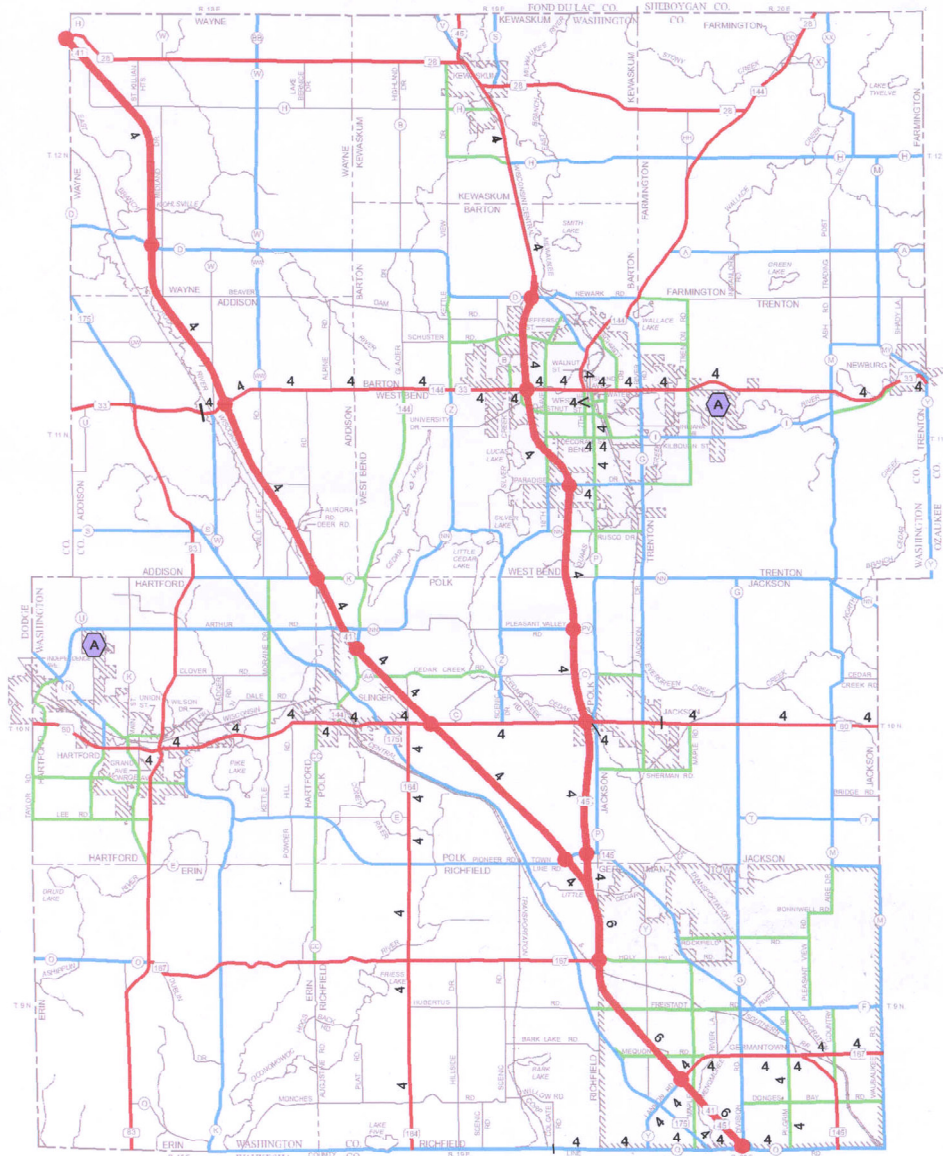
As part of the planning process, a study was conducted on STH 144 to determine the number of vehicles that represent “through” traffic as opposed to “local” traffic. The data revealed that only 13 percent of the traffic on STH 144, between USH 41 and STH 33, is “through” traffic. The majority of the traffic using STH 144 is local traffic. Accordingly, the plan recommends that the roadway be transferred to the local jurisdictions (Village of Slinger, Town of Polk and Town of West Bend).








- **Jurisdictional transfer of CTH K between USH 41 and STH 144 to the local trunk arterial system, rather than as a county arterial.**
- **Jurisdictional transfer of CTH AA, from county to the local road system.**
- **Jurisdictional transfer of STH 175 from the State Highway System to the County Trunk Highway System through the Village of Slinger.**


The adopted arterial street and highway system for the Village of Slinger and surrounding environment is illustrated on the map provided on the next page from the *Washington County Jurisdictional Highway System Plan: 2020*.

FINAL RECOMMENDED WASHINGTON COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



FREEWAY
 STATE TRUNK HIGHWAY
 INTERCHANGE
STANDARD ARTERIAL
 STATE TRUNK HIGHWAY
 COUNTY TRUNK HIGHWAY
 LOCAL TRUNK HIGHWAY

4 NUMBER OF TRAFFIC LANES
 (2 WHERE UNNUMBERED)

INTERMODAL TERMINAL
 A - AIRPORT

If the planned new route of USH 45 within the Village of Kewaskum is not implemented, the planned extension of Kettle View Drive between CTH and Badger Road, and existing Badger Road and its planned extension between Kettle View Drive and USH 45 should be planned county trunk arterials, and not planned local trunk arterials.

Source: SEWRPC.



SEWRPC also has prepared and adopted a regional bicycle and pedestrian plan. That plan recommends that appropriate bicycle accommodation be provided on all arterial streets at the time a street is constructed or reconstructed. The regional plan also includes a recommended system plan that seeks to link population centers of 5,000 or more persons and would provide for bicycle travel within urbanized areas. The regional plan also recommends the construction of sidewalks in areas developed for urban uses, which would include the Village of Slinger.

MIDWEST REGIONAL RAIL INITIATIVE

Since 1996, the Midwest Regional Rail Initiative (MWRI) advanced from a series of service concepts, including increased operating speeds, train frequencies, system connectivity and high service reliability, into a well-defined vision to create a 21st century regional passenger rail system. This vision has been transformed into a transportation plan known as the Midwest Regional Rail Systems (MWRRS). The primary purpose of the MWRRS is to meet future regional travel needs through significant improvements to the level and quality of regional passenger rail service. The major MWRRS elements will improve Midwest travel. The major plan elements include:



- Use of 3,000 miles of existing rail rights-of-way to connect rural, small urban and major metropolitan areas throughout Minnesota, Iowa, Missouri, Illinois, Indiana, Ohio, Michigan and Wisconsin.
- Operation of “hub-and-spoke” passenger rail system through Chicago to locations throughout the Midwest.
- Introduction of modern train equipment operating at speeds up to 110 mph.
- Provision of multi-modal connections to improve system access.
- Improvements in reliability and on-time performance.

The cost to provide the improvements needed to facilitate a Chicago-Milwaukee-Minneapolis/Green Bay Route would be \$978 million, including rolling stock (i.e. passenger cars) and infrastructure improvements (i.e. track improvements). If the plan is carried out, residents of Slinger will be able to access a high-speed rail line in Milwaukee. The current schedule provided in the MWRRS plan calls for the entire project to be completely on-line by 2012. The first phase of the MWRRS plan in Wisconsin called for 110 mph rail service between Madison and Milwaukee, and continuing to Chicago by 2003. Implementation of this phase of the plan has not yet been realized.

COMPARISON TO STATE AND REGIONAL PLANS

Generally, there is a division in jurisdiction related to transportation facilities and services (i.e. County Roads, State Highways, and Village Roads). The transportation network in the Village of Slinger requires coordination between these jurisdictions to work efficiently. Therefore, in developing this plan, the Village invested a significant amount of time researching and coordinating with county, regional and state transportation plans, policies and programs. As a result, the Village’s transportation goals, policies, objectives and programs seek to compliment state and regional transportation goals, objectives, policies and programs by providing local transportation facilities and services that connect to county/regional and state facilities. This plan also recognizes the planned jurisdictional transfers to the Village, which will increase Village road maintenance responsibilities and expenses.

PAVEMENT SURFACE EVALUATION AND RATING (PASER)

In 2000, the Village of Slinger completed a Pavement Surface Evaluation and Rating (PASER) for all Village of Slinger roads in accordance with WisDOT requirements. A follow-up evaluation was completed in 2003. PASER is a visual inspection system to develop a condition

rating for community roads. PASER is an important tool for planning because it gives a picture of road conditions on all roads and can identify candidates for maintenance and rehabilitation. Surface defects, cracking and potholes are all examined during a typical PASER evaluation. Paved Roads are rated 1 – 10 based on their condition.

TABLE 18 PASER RATINGS AND MAINTENANCE NEEDS	
Paved Road Ratings	Need(s)
9 & 10	no maintenance required
7 & 8	routine maintenance, crack sealing and minor patching
5 & 6	preservative treatments (seal coating)
3 & 4	structural improvement and leveling (overlay or recycling)
1 & 2	reconstruction

Table 19 provides a summary of the PASER ratings in the Village. In total, there are **more than 16 miles of roads in Slinger** under the jurisdiction of the Village.

According to the PASER manual, it is recommended that communities strive to attain a rating of 7 for all roads. Likewise, the Village of Slinger places a strong priority on maintaining local roads. The Village Board should continue to use the PASER results during its annual update of the Village of Slinger Capital Improvements Plan and Budget to effectively plan for road improvements in relation to other Village spending needs.

TABLE 19 ROADWAY BY PASER RATINGS					
PASER RATING	Street Name	From	To	2003 PASER RATING	2000 PASER RATING
1	None	NA	NA	NA	NA
2	Highview Drive	Oakview Drive	Highview Drive	2	4
	Industrial Drive	Commerce Blvd.	End	2	7
	Maple Ave. S.	W. Washington St.	End	2	5
	MW Road	RR Tracks	Waste Water Plant	2	4
	MBW Road	Hartford Road	RR Tracks	2	5
	Oak Terrace	Oakview Drive	Oakview Drive	2	3
	Oakview Drive	E. Washington St.	End	2	5
	Woodview Ct.	Fairview Ct.	End	2	7
3	Buchanan St.	Kettle Moraine Dr. S.	Oak St.	3	5
	Chestnut St.	Kettle Moraine Dr. S.	Oak St.	3	4
	Kettle Moraine Dr. N.	138 Kettle Moraine Dr.	End	3	4
	Oak St.	Chestnut Dr.	Buchanan St.	3	3
	Oak St.	W. Washington St.	Buchanan St.	3	5
	Water St.	Kettle Moraine Dr.	Oak St.	3	4
4	Community Dr.	Kettle Moraine Dr. N.	Tennies Dr.	4	4
	Hartford Road	James St.	Railroad	4	NA
5	Arthur Road	E. Village Limits	W. Village Limits	5	5
	Polk Street	Kettle Moraine Dr. S.	Hartford St.	5	6
	St. Paul Dr.	E. Washington St.	End	5	5
	Water St.	Elm St.	Hartford St.	5	5

6	Century Ct.	Charolais Dr.	End	6	7
	Charolais Dr.	W. Commerce Blvd.	Bonnie La.	6	7
	Elm St.	Polk St.	Water St,	6	6
	Fairview Ct.	St. Paul Dr.	End	6	7
	Hartford Road	Railroad	End Curb & Gutter	6	NA
	Kettle Moraine Dr. N.	Heder Dr.	CTH AA	6	6
	Lover's Lane	Commerce Blvd.	End	6	7
	Speedway Ct.	CTH AA	End	6	7
	Washington St. E.	N. end of Median Island	Commerce Blvd	6	7
	Water St.	Kettle Moraine Dr.	Elm St.	6	6
	Whitetail Ct.	Charolais Dr.	End	6	7
7	Chestnut St.	Kettle Moraine Dr. S	Elm St.	7	4
	Guernsey Ct.	Charolais Dr.	End	7	8
	Hartford Road	End of Curb	Village Limits	7	7
	Hartford St.	Water St.	Polk St.	7	9
	James St.	Hartford Rd.	End	7	7
	Scenic Ave	E. Washington St.	End	7	5
	Scenic Ct.	Scenic Ave.	End	7	7
	Slinger Rd.	Commerce Blvd. E.	Village Limits	7	6
	Washington St. E.	Commerce Blvd.	730 ft S. of Commerce	7	6
	Washington St. E.	730 ft S. of Commerce	Village Limits	7	6
	Weil Dr.	W. Washington St.	Pavement Change	7	7
	Winter Lane.	Kettle Moraine Dr.	End	7	7
8	Beau's Bay	Elly's Way	End	8	9
	Bonnie La.	Commerce Blvd.	End	8	5
	Central Ave.	E. Washington St.	End	8	7
	Elly's Way	Lover's Lane	Lou's Way	8	8
	Elm St.	Water St.	End	8	6
	Glacier Pass	Olympic Dr.	Lover's Lane	8	7
	Glen Hill Dr.	E. Washington St.	End	8	7
	Glen View Ct. N.	Glen View La.	End	8	7
	Glen View Ct. S.	Glen View La.	End	8	7
	Glen View La.	Glen Hill Dr.	End	8	7
	Hill Alley	Kettle Moraine Dr. S.	End	8	8
	Howard Ave.	Hartford Rd.	End	8	7
	Info Hwy.	Industrial Dr.	End	8	8
	Kettle Moraine Dr. N.	Heder Dr.	Overlook Dr.	8	5
	Kettle Moraine Dr. N.	Washington St.	138 Kettle Moraine Dr.	8	8
	Lou's Way	Commerce Blvd.	Olympic Dr.	8	7
	Nordic La.	Timberline Dr.	Dead End	8	9
	Olympic Dr.	Glacier Pass	Glen View La.	8	8
	Overlook Dr.	Kettle Moraine Dr.	End	8	8
	Parkway Dr.	Commerce Blvd. E	Kettle Moraine Dr.	8	8
	Polk St.	Slinger Rd.	410' East	8	6
	Sara's Ct.	Lout's Way	End	8	8
	Slinger Rd.	Commerce Blvd. E.	E. Washington St.	8	5
	Storck St.	Kettle Moraine Dr. S.	End	8	8
	Timberline Dr.	Glacier Pass	Elly's Way	8	8
	Washington St. E.	Kettle Moraine Dr.	N. End of Median Island	8	7
	Washington St. W.	220' N. of Maple Ave.	Bridge Overpass	8	7
	Washington St. W.	Bridge Overpass	30' N. of Weil Dr.	8	7
	Washington St. W.	Kettle Moraine Dr.	220' N. of Maple Ave.	8	7
	Weil Dr.	Pavement Change	End	8	7
	Winfield Ct.	Weil Dr.	End	8	7
	Woodview Ct. E.	Lou's Way	End	8	7
	Woodview Ct. W.	Lou's Way	End	8	7

9	Beine St.	E. Washington St.	Polk St.	9	8
	Elm Ave.	Maple Ave. N.	Park Ave.	9	9
	Glacial Dr.	Glacier Pass	End	9	7
	Heder Dr.	Kettle Moraine Dr. N.	Maple Ct.	9	8
	Lawndale Ave.	Oak St.	End	9	9
	Maple Ave. N.	W. Washington St.	Maple Ct.	9	8
	Park Ave.	Elm Ave.	Male Ave.	9	8
	Park Ave.	Maple Ave.	Spruce Ave.	9	8
	Polk St.	Hartford St.	1080' east	9	8
	Spruce Ave.	W. Washington St.	End	9	8
	Tennies Dr.	Kettle Moraine Dr.	End	9	8
10	Access Road	Maple	County Grounds	10	2
	Bayberry La.	Arthur Rd.	End	10	8
	Hartford Rd.	Kettle Moraine Dr. S.	James St.	10	7
	Kettle Moraine Dr. S.	Commerce Blvd.	Chestnut St.	10	4
	Maple Ct.	Heder Dr.	End	10	5
	Nordic Ct.	Elly's Way	End	10	10
	Parkway Ct.	Kettle Moraine Dr.	End	10	1
	Royal Oak Ct.	Bayberry La.	End	10	8
	Ski View Ct.	Heder Dr.	End	10	5
	Park Ct.	Kettle Moraine Dr.	End	10	NA

Source: 2003 PASER Rating System Report, Village of Slinger

Transportation Issues and Concerns

WALKING AND CYCLING CONNECTIONS

The many highways that traverse the Village have traffic volumes that present a challenge to pedestrians and cyclists. These highways are a deterrent for walkers and recreational cyclists. This is particularly an issue with USH 41. As the Village continues to expand east of USH 41, considerations for safe pedestrian and cycling access to Village amenities west of USH 41 must be considered. This may be achieved when the recommendations of the *WisDOT 2020 Bicycle Corridors Plan* are followed to develop a crossing at STH 144.

Similarly, during this planning process, concerns were raised that sidewalk connections are not continuous throughout the Village. To remedy this situation, the Village is in the process of inventorying and then identifying sidewalk infill projects. Likewise, the Village requires sidewalks for new development projects. The Village will also consider the need for wider sidewalks (i.e. 6' or 8' wide) to be installed along collectors and arterials.

The *Trail & Sidewalk Facilities Plan Map* presented earlier in this chapter illustrates locations of potential local recreation trails, the Ice Age Trail, sidewalks, and on-road trails (bike lanes) along Lover's Lane and Kettle Moraine Roads. These improvements will greatly expand opportunities for walking and cycling in and through the Village. Consistent with the recommendations provided by SEWRPC in the 1995 Village of Slinger Plan, connections to regional trail systems are further recommended by this plan.

LOCAL STREET CONNECTIVITY

Slinger is a community that is bisected by state and interstate highway corridors, railroad corridors and natural resources (i.e. wetlands). This situation results in issues of connectivity throughout the Village. Of particular concern, is a lack of connection between subdivisions. In

an attempt to begin to address this issue, the *Recommended Transportation Improvements Map*, illustrates locations for street connections between developments. The final design and alignment of these roadways would still be necessary, but this map should serve as a guide for determining where connections should be provided.

TRANSPORTATION FOR SENIORS

Village residents expressed a lack of transportation choices for seniors as a concern at the on-set of the planning program. It is not possible for Village to invest in a bus service, nor is it probable Washington County will make this investment, given funding restrictions and limited demand. Washington County currently sponsors a shared-ride taxi service that is available to all residents of the County. Additional transportation for seniors will require investment of private organizations (i.e. churches and senior housing providers), as well as, the efforts of volunteer networks. The Village of Slinger supports the efforts of these groups and individuals to meet senior transportation needs.

TRAIL DEVELOPMENT

As described in the inventory section of this chapter, several potential trail routes have been identified in the Village. These trails are shown on the *Trail and Sidewalk Facilities Plan Map*. During this planning process, some have suggested that there is no need for trails in the Village given access to sidewalks. It should be noted that trails are needed to complement sidewalks because:

- Sidewalk connections do not cover all areas of the Village.
- Sidewalks are situated, for the most part, along streets and roads. Alternatively trails are located adjacent to natural areas. As a result, trails provide a more scenic and peaceful recreation environment.
- Sidewalk connections are not as direct as trail connections in some areas, particularly to gain access to regional parks.
- Sidewalks end at the Village Limits. Cyclist and pedestrians need trails to continue through the region.

TRANSPORTATION BUDGETING

Another long-standing transportation issue in the Village of Slinger is the ever-present concern of road maintenance and improvement costs. These types of municipal activities are a major expense and can consume a large share of the limited Village budget. The Village has a capital improvements plan and budget to help effectively anticipate transportation costs over time. It is strongly recommended that the Village continue to use this tool during the life of the plan and beyond.

Another option the Village may want to investigate to finance transportation improvements is a Transportation Utility. A transportation utility is similar in concept to a stormwater utility, but deals specifically with the Village's transportation infrastructure. That includes design, construction and reconstruction, operation and maintenance of streets, sidewalks, street lighting, signalization and signage in Village rights-of-way. These are all on-going activities that the Village currently pays for with special assessments for new street construction, limited state and federal aids and general revenue from local property taxes. The transportation utility raises revenue by charging all property owners based on the amount of traffic their property generates.

PIONEER AND ARTHUR ROAD EXTENSIONS

The proposed extension of Pioneer Road identified in the *Washington County Jurisdictional Highway System Plan – 2020* will create a more direct, less congested route between USH 41 and Hartford. This chapter also indicates that Arthur Road will be upgraded in the future. When all upgrades are completed, this corridor will serve the Dodge Business Park in the City of Hartford. It will function as a 2-lane rural truck route around HWY 60 to CTH K intersection (1.5 miles north of STH 60). The route will bypass Slinger and Hartford. These upgraded routes will also be used by other motorists, not just trucks, passing through the area. Development pressure in the Town of Polk and Town of Hartford will likely follow after these routes are completed. These roadway improvements will create several challenges and opportunities for the Village:

Challenges

- To retain traffic volumes on STH 144 and STH 60 to sustain the needed customer base for Village businesses.
- To avoid a situation where business and industry seek to locate (and relocate) beyond the Village along this corridor. This situation would be particularly problematic if business development were to occur without municipal water and sewer service, creating a potential barrier for extension of future services and growth of the Village. Likewise, development along this corridor, may simply relocate congestion thereby eliminating the effectiveness of this corridor as a through transportation route.

Opportunities

- To coordinate with the Town of Polk and Town of Hartford to protect the investments of the Village and the rural character of the Towns.
- To use extra-territorial zoning to ensure that business and industry remain in the Village, where infrastructure is available, and the Town of Polk and Town of Hartford retain their rural character.
- To effectively plan for development along the corridors, in accordance with the goals and visions of this plan, infrastructure capacities, and extra-territorial zoning requirements.
- To create alternative truck routes to help minimize some commuter truck traffic that can create a nuisance for area residents, motorists and pedestrians.

See the discussion of a conflict in the route alignment of Arthur Road on page 5-8.

Coordination with Other Required Plan Elements

ISSUES AND OPPORTUNITIES

The Issues and Opportunities Element establishes the framework for planning – the overall future vision – the ideal from which this plan has been developed. That vision will impact the way the Village considers and approves changes to the transportation network. It will also guide Village participation in activities sponsored by WisDOT and Washington County. To realize the vision, and support the transportation vision presented in this chapter, the Village will seek to maintain its quality roads and expand pedestrian amenities, including trails.

HOUSING ELEMENT

The Village has a history of maintaining its roadways, requiring subdivision streets be built to minimum standards, and requiring developers to comply with local requirements. These controls, as well as the Village's commitment to sidewalk development, are important to the success of the transportation network and the local quality of living. Providing well-connected residential areas, including trails and sidewalks, invites people to move into and through the community.

AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

Slinger has abundant areas of wetlands and floodplains, as well as, man-made park facilities. These amenities contribute to the character of the Village and quality of living. To provide access to these areas and to enhance enjoyment for residents, trail development is encouraged in this chapter.

UTILITIES AND COMMUNITY FACILITIES

There is a close relationship between the Transportation Element and the Utilities and Community Facilities Element. This may be due to the fact that transportation facilities are one type of community facility. For instance, in this chapter, local trails and sidewalks are encouraged. Likewise, the location of trail routes should be coordinated with utility easements and recreational amenities identified in the Utilities and Community Facilities Element. Additionally, storm water management policies and practices are profiled in the Utilities and Community Facilities Element. Roads and other hard-surface transportation improvements (i.e. sidewalks, parking areas, etc.) have the potential to impact storm water runoff. These examples illustrate the close relationship between these two elements. As a result, it was necessary to coordinate the development of these two elements repeatedly to ensure compatibility.

ECONOMIC DEVELOPMENT

Providing a quality transportation system is important to the success of any business. Just as businesses need good access, employees also want to be able to efficiently access their places of employment. Lack of access to employment opportunities may affect individual decisions to seek employment or live in a community. In the Village of Slinger, these issues were carefully considered, particularly with respect to the location of new commercial and industrial development. The local solutions to these issues are reflected on the *Recommended Land Use Plan for 2025*.

LAND USE

While transportation improvements generally respond to changes in land use, they also have the potential to directly and indirectly affect land development either by inducing new development or altering the pattern of existing development. However, land use changes are dependent on other factors as well. These include local plans, zoning, taxation, and the provision of public services.

What steps will be taken to ensure that transportation decisions and land use decisions are compatible? Although transportation is not the only influence on land use, it is important to be aware that decisions regarding the transportation system may impact land use both directly and indirectly. Direct impacts that are caused by the construction of a new transportation facility,

changes to an existing facility, and/or decision to change traffic patterns along a facility. These may result in positive or negative impacts. Efforts were made to plan accordingly for land uses along the highways and county roads in the Village. The result of these efforts is reflected on the *Recommended Land Use Plan for 2025*.

The Land Use Element of this plan also addresses the concept of transportation facilities affect on the aesthetics of the Village. Aesthetics refer to the “appearance and character” of an area. Generally speaking, beyond meeting the traffic demand and structural requirements, a road should reflect the aesthetics of an area. For the Village of Slinger the aesthetic character varies significantly from one area to the next. The historic downtown has a much different character than the developing state highway corridors. The Land Use Element discusses streetscape techniques, many of which originated in the *Land Use and Street System Plan for the Village of Slinger: 2010*.

INTERGOVERNMENTAL COOPERATION

The transportation network in Slinger consists of many elements that are not controlled directly by the Village. For example, county trunk highways, state highways, and air transportation choices are all provided by other agencies and organizations. To ensure that transportation choices remain plentiful, Slinger will coordinate closely with SEWRPC, which is the area transportation planning agency and metropolitan planning organization for the Southeastern Wisconsin Region. In addition to preparing long-range transportation plans, SEWRPC is responsible for preparing a Transportation Improvement Program (TIP), which includes transportation projects programmed to occur in Southeastern Wisconsin. Transportation projects proposed to be implemented using Federal funds must be listed in the TIP in order to receive such funding.

IMPLEMENTATION

Using a capital improvements plan and budget, the costs of transportation improvements identified in this chapter can be addressed. The Village’s capital improvements plan and budget will seek to not only plan for Village expenditures but also to locate grant and low interest loan opportunities that may exist to fund needed improvements. Another opportunity that can also be pursued to finance maintenance of the transportation network is a transportation utility.

Transportation Goals, Objectives and Policies

It is the goal of the Village of Slinger that residents will enjoy safe streets and highways with minimal traffic congestion and safe bike/pedestrian routes and trails. Because the Village of Slinger has a limited amount of control over county roads and state highways, the transportation goals and objectives provided in Chapter 11 related to actions that the Village can control. The Village of Slinger will work, in accordance with the Intergovernmental Cooperation Element of the Wisconsin Comprehensive Planning Law, with Washington County and WisDOT to ensure that adequate community transportation facilities are available to serve the area. An overall transportation policy is provided below.

OVERALL TRANSPORTATION POLICY

Provide a broad range of transportation choices, including quality roads, highways, sidewalks and trails to meet the diverse needs of residents.